

### REMARKS

This is in full and timely response to the non-final Office Action dated July 13, 2005 (Paper No. 07062005). The present Amendment amends claims 1, 3 and 5 in order to further clarify a portion of the scope sought to be patented, and otherwise disputes certain findings of fact made in connection with the rejection of the claims. Support for these amendments can be found variously throughout the specification, including, for example, page 9 lines 17-18. No new matter has been added. Accordingly, claims 1 to 6 are presently pending in the application, each of which is believed to be in condition for allowance. Reexamination and reconsideration in light of the present Amendment and the following remarks are respectfully requested.

#### Claim to Priority

Acknowledgement of the proper receipt of the certified formal papers filed in connection with Applicant's claim to priority under 35 U.S.C. § 119(a)-(d) is noted with appreciation.

#### Drawings

Acceptance and entry of the Drawings filed March 11, 2004 is noted with appreciation.

#### Specification & Abstract

The specification has been reviewed to correct minor matters of form and syntax. Entry of these changes, involving minor matters not involving new matter, is respectfully solicited.

#### Claim Objections

The Applicant thanks the examiner for a thorough reading of the claims. In accordance with the examiner's suggestion, claim 5 has been amended to correct minor informalities. Withdrawal of this objection is therefore courteously solicited.

#### Claim Rejections- 35 U.S.C. § 103

In the Action, claims 1-6 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent No. 6,329,879 to Maruyama et al. ("Maruyama") in view of U.S. Patent No. 5,659,264 to Ariyoshi et al. ("Ariyoshi"). This rejection is respectfully traversed.

*Claims 1 and 2*

With respect to the rejection of claim 1, it has been conceded in the Action that Maruyama **does not** disclose a second resistance element with a temperature coefficient smaller than that of the first resistance element. *See, e.g.*, page 3 of Action. Consequently, in order for a *prima facie* case of obviousness to be successfully established, not only must Ariyoshi teach of a second resistance element with a temperature coefficient smaller than that of the first resistance element, but the proposed modification from Ariyoshi must not destroy a main object of the Maruyama invention. However, any attempt to combine the alleged teaching of Ariyoshi, with those of Maruyama destroys a main object of the Maruyama invention, weakening the Examiner's alleged motivation to combine. *See, e.g., In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984); *accord.* MPEP 2143.01 ("If [the] proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification"). As established by the federal courts, if the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. *See, e.g., In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959); *accord.* MPEP 2143.01.

As detailed in col. 5, lines 39-46, Ariyoshi arguably discloses a reference voltage circuit supplied to an input of a voltage follower circuit wherein the resistors in the reference voltage circuit are arranged with a resistor having a small temperature coefficient disposed on the side of the dividing resistance closer to the ground. This arrangement produces a negative temperature drift coefficient for the reference voltage.

As detailed in col. 8, lines 29-57, Maruyama arguably discloses a resistance type voltage divider circuit with a first resistor whose resistance value is substantially constant connected to a low potential and a second resistor having a positive temperature coefficient connected to ground (high potential). With the above arrangement of resistors, the  $V_{gs}$  value decreases with an increase in temperature.

The Office Action alleges that it would be obvious to one of ordinary skill in the art to combine Ariyoshi with Maruyama resulting in the second resistance element having a temperature coefficient smaller than that of the first resistance element. However, by combining the teaching in Ariyoshi that the resistor disposed closer to the ground has a smaller temperature coefficient, a main object the Maruyama invention is destroyed. If, as described in Ariyoshi, the second resistance element connected closer to ground (high potential in Maruyama) had a smaller temperature coefficient than the first resistance element (connected to the low potential in Maruyama), an increase in temperature would result in an increase in the Vgs value destroying the intended outcome in Maruyama of lowering the Vgs value with an increase in temperature resulting in the reduction of the idle current. *See, e.g.,* Maruyama col. 8, lines 47-57.

Therefore, because any attempt to combine the alleged teaching of Ariyoshi, with those of Maruyama destroys a main object of the Maruyama invention, a *prima facie* case of obviousness has not been established and withdrawal of this rejection is respectfully requested. *In re Gordon*, 733 F.2d 900.

Moreover, aside from the novel limitations recited therein, claim 2, being dependent either directly or indirectly upon allowable base claim 1, is also allowable at least by virtue of its dependency upon allowable claim 1. Withdrawal of the rejection of claim 2 is therefore courteously solicited.

#### *Claims 3 and 4*

With respect to the rejection of claim 3, it has been conceded in the Action that Maruyama does not disclose a third resistance element with a temperature coefficient smaller than those of the first resistance element and the second resistance element. *See, e.g.,* page 4 of Action. Consequently, in order for a *prima facie* case of obviousness to be successfully established, not only must Ariyoshi teach of a third resistance element with a temperature coefficient smaller than that of the first resistance element and second resistance element, but the proposed modification from Ariyoshi must not destroy a main object of the Maruyama invention. However, any attempt to combine the alleged teaching of Ariyoshi, with those of Maruyama destroys a main object of the Maruyama invention, weakening the Examiner's alleged motivation to combine. *See, e.g., In re Gordon*, 733 F.2d 900; *accord.* MPEP 2143.01 ("If [the] proposed modification would render the

prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification”). As established by the federal courts, if the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. *See, e.g., In re Ratti*, 270 F.2d 810; *accord.* MPEP 2143.01.

As detailed in col. 5, lines 39-46, Ariyoshi arguably discloses a reference voltage circuit supplied to an input of a voltage follower circuit wherein the resistors in the reference voltage circuit are arranged with a resistor having a small temperature coefficient disposed on the side of the dividing resistance closer to the ground. This arrangement produces a negative temperature drift coefficient for the reference voltage.

As detailed in col. 8, lines 29-57, Maruyama arguably discloses a resistance type voltage divider circuit with a first resistor whose resistance value is substantially constant connected to a low potential and a second resistor having a positive temperature coefficient connected to ground (high potential). With the above arrangement of resistors, the  $V_{gs}$  value decreases with an increase in temperature.

The Office Action alleges that it would be obvious to one of ordinary skill in the art to combine Ariyoshi with Maruyama resulting in a variable second resistance element. It is unclear what is meant by a variable second resistance element as stated in the Action. Nevertheless, by combining the teaching in Ariyoshi that the third resistance element disposed closer to the ground has a smaller temperature coefficient, a main object the Maruyama invention is destroyed. If, as described in Ariyoshi, a third resistance element connected closer to ground (high potential in Maruyama) having a smaller temperature coefficient than that of the first resistance element and second resistance element is incorporated into the Maruyama circuit, an increase in temperature would result in an increase in the  $V_{gs}$  value destroying the intended outcome in Maruyama of lowering the  $V_{gs}$  value with an increase in temperature resulting in the reduction of the idle current. *See, e.g.,* Maruyama col. 8, lines 47-57.

Therefore, because any attempt to combine the alleged teaching of Ariyoshi, with those of Maruyama destroys a main object of the Maruyama invention, a *prima facie* case of obviousness

has not been established and withdrawal of the rejection of claim 3 is respectfully requested. *In re Gordon*, 733 F.2d 900.

Moreover, aside from the novel limitations recited therein, claim 4, being dependent either directly or indirectly upon allowable base claim 3, is also allowable at least by virtue of its dependency upon allowable claim 3. Withdrawal of the rejection of claim 4 is therefore courteously solicited.

*Claims 5 and 6*

Claim 5 recites, *inter alia*, a power amplifier comprising a second resistance element with a **temperature coefficient smaller than that of the first resistance element**, a third resistance element with a temperature coefficient smaller than that of the first resistance element, **a connection point of the second terminal of the second resistance element and the first terminal of the third resistance element is connected to a gate terminal of the field effect transistor**.

In contrast, it is conceded in the Office Action that Maruyama fails to disclose a second resistance element with a temperature coefficient smaller than that of the first resistance element, wherein a second terminal of the second resistance element and a first terminal of the third resistance element are connected, and a connection point of those terminals is connected to a gate terminal of the field effect transistor.

Further, although Ariyoshi arguably discloses three resistance elements arranged such that a **resistor having a small temperature coefficient** is disposed on the side of the dividing resistance closer to the ground, Ariyoshi fails to disclose, teach or suggest at least a **second resistance element with a temperature coefficient smaller than that of the first resistance element** as disclosed in claim 5. *See, e.g.*, Fig. 8 and col. 5, lines 39-46. In fact, Ariyoshi teaches that a first resistance element and a second resistance element have temperature coefficients equal in value. *See, e.g.*, col. 5, lines 8-12. Furthermore, although Ariyoshi arguably discloses a second resistance element and a third resistance element connected to an operational amplifier, Ariyoshi fails to disclose, teach or suggest at least a connection point of a second terminal of the second resistance element and a first terminal of the third resistance element **is connected to a gate terminal of the field effect transistor** as disclosed in claim 5. *See, e.g.*, Fig. 8.

Accordingly, because Maruyama and Ariyoshi, either alone or in combination, fail to disclose, teach or suggest each and every limitation of claim 5, a *prima facie* case of obviousness has not been established, and withdrawal of this rejection is respectfully requested. *See, e.g., In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974); *accord*. MPEP 2143.03.

Moreover, aside from the novel limitations recited therein, claim 6, being dependent either directly or indirectly upon allowable base claim 5, is also allowable at least by virtue of its dependency upon allowable claim 5. Withdrawal of the rejection of claim 5 is therefore courteously solicited.

Conclusion

For at least the foregoing reasons, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the examiner is respectfully requested to pass this application to issue. If the examiner has any comments or suggestions that could place this application in even better form, the examiner is invited to telephone the undersigned attorney at the below-listed number.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 18-0013, under Order No. SON-2950 from which the undersigned is authorized to draw.

Dated:

9/28/05

Respectfully submitted,

By

Ronald P. Kananen

Registration No.: 24,104

RADER, FISHMAN & GRAUER PLLC

1233 20th Street, N.W.

Suite 501

Washington, DC 20036

(202) 955-3750

Attorney for Applicant